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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |  |
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| 10/507,074  | 09/09/2004  | Tokumatsu Ohto       | 740819-1086         | 4414             |  |  |
| 78198   | 7590        | 05/01/2008           | EXAMINER            |                  |  |  |
| Studebaker & Brackett PC<br>1890 Preston White Drive<br>Suite 105<br>Reston, VA 20191 |             |                      | OMGBA, ESSAMA       |                  |  |  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |  |  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

***Response to Arguments***

1. Applicant's arguments filed April 10, 2008 have been fully considered but they are not persuasive.

In response to Applicant's argument that the claimed range "50 $\mu\text{m} < C < 500\mu\text{m}"$  can be found in, e.g., page 13, line 25 of the original specification, the examiner respectfully disagrees. Page 13, line 25 of the original specification discloses a range "50 $\mu\text{m} \leq C \leq 500\mu\text{m}"$ , which is different from the claimed range, since the claimed range excludes values that are equal to "50 $\mu\text{m}$ " and "500 $\mu\text{m}$ ".

In response to Applicant's argument that Leifeld fails to teach, disclose, or suggest Applicant's claimed range of 50  $\mu\text{m} \leq C \leq 500 \mu\text{m}$ , the examiner respectfully disagrees. As outlined in the final Office action mailed January 10, 2008, Leifeld discloses a range "C" to be approximately between 0.5 and 5 mm (see page 4, lines 1-4). The examiner submits that the lower limit of Leifeld's range overlaps the upper limit of Applicant's range as claimed. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. In *re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (The prior art taught carbon monoxide concentrations of "about 1-5%" while the claim was limited to "more than 5%." The court held that "about 1-5%" allowed for concentrations slightly above 5% thus the ranges overlapped.); *In re Geisler*, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997) (Claim reciting thickness of a protective layer as falling within a range of "50 to 100 Angstroms" considered *prima facie* obvious in view of prior art reference teaching

that “for suitable protection, the thickness of the protective layer should be not less than about 10 nm [i.e., 100 Angstroms].” The court stated that “by stating that suitable protection’ is provided if the protective layer is about’ 100 Angstroms thick, [the prior art reference] directly teaches the use of a thickness within [applicant’s] claimed range.”). Similarly, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (Court held as proper a rejection of a claim directed to an alloy of “having 0.8% nickel, 0.3% molybdenum, up to 0.1% iron, balance titanium” as obvious over a reference disclosing alloys of 0.75% nickel, 0.25% molybdenum, balance titanium and 0.94% nickel, 0.31% molybdenum, balance titanium.), see MPEP § 2144.05.

In response to Applicant’s argument that the particular range is critical, the examiner submits that Applicant discloses a range that encompasses (equal to 500 µm) in the specification, therefore the argument that a range strictly less than 500 µm is critical to Applicant’s invention is not persuasive.

In view of the above remarks, the examiner maintains that a *prima facie* case of obviousness has been established in the instant application.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgbal whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgbal/  
Primary Examiner, Art Unit 3726

eo  
April 29, 2008